

# INDEXA



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## 9M0C: The 1998 CDXC Spratly Islands DXpedition by Don Beattie, G3OZF

For many HF operators, DXpeditions provide a high level of excitement. Not only is there an opportunity to work a rare country, there is the thrill of vicariously sharing the challenges faced by operators who travel to remote parts of the world.

During my years in amateur radio, I, too, have eagerly awaited the activation of rare countries so it was a wonderful opportunity when a group of colleagues from the CDXC (Chiltern DX Club)—the UK DX Foundation—decided to mount a major DXpedition to a rare country. It didn't take long to decide that the Spratly Islands would provide an excellent choice for such an expedition. They are relatively easy to reach, accommodations are available, and in the Malaysian part of the group there are no licensing difficulties. And so it was that in the summer of 1996 plans began to form for a major effort to take the Spratly Islands off the "most wanted" lists of DXers.

The Spratly Islands have a unique place in amateur radio folklore. Located in the South China Sea, they are disputed territory. Vietnam, Malaysia, the Philippines, China, Taiwan, and Brunei have each made claims on some or all of the islands or the surrounding seas. In past years, expeditions have been fired on by military forces from one or another of these countries and, tragically, two amateurs died in 1983 from such action. Fortunately, all is more peaceful now and the island of Layang Layang is an



John, N2QW (G4DQW) operating 9M0C

idyllic retreat for keen divers and radio amateurs.

Layang Layang lies some 160 miles northwest of Kota Kinabalu in Borneo. Built-up from the original sandbars, it now houses a small base for the Malaysian navy and a dive resort with some of the best scuba diving in the world. The island's reef is some six miles in circumference with ocean walls reaching down 2000 feet. The island itself is some 300 by 1100 meters.

### The team and its objectives

From the start, the team nucleus was created from a small group of CDXC members: Neville, G3NUG; Don, G3OZF; Steve, G4JVG; Don, G3XTT; John, G3WGV; and Tony,

G0OPB. The team was later joined by Ray, G3NOM (who was living in Malaysia at the time); Mike, G3SED; Vince, K5VT; John, N2QW (also G4DQW); Jeff, 9H1EL; and Kazu, JA1RJU. Our local logistics support came from Donald, 9M6SU.

Early in the planning we agreed that our mission would be "to reach those parts that other Spratly DXpeditions had not reached"—a challenge for an operation near the minimum of the sunspot cycle.

### The advance party

On February 6th, I left London via Kuala Lumpur for Kota Kinabalu (KK). This was the starting point for the more adventurous part of the journey by small plane to the island. Ray, G3NOM, and I were the advance party, arriving 48 hours before the main team. We also flew in the full set of Yaesu equipment and the boxes which had been air-freighted from London on the same plane, a trusty Twin Otter. The heavier equipment—all 1.5 tons of it—had been delivered to the island by trawler a few days earlier. On February 8th, Ray and I presented ourselves at the airport in KK for the 75-minute flight to the island. The plane was virtually full of freight and we were both wedged between boxes and crates in very cramped conditions. We flew out at 6000 feet over the South China Sea in perfect weather. The ground temperature was about 35°C but in the plane

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it was cool and comfortable. As we approached the area of the island, clouds appeared below us, denying us a view of the sea. Then, magically, there was a gap in the clouds and there it was—Layang Layang in a pool of sunlight, the destination for our expedition.

On Tuesday, February 10th, the main party arrived from KK. After an hour or so to assess the situation, we agreed to house all stations in the large, air-conditioned conference room. This provided better access to the large antenna space and allowed greater flexibility in antenna selection. During the next 36 hours, we assembled a vast antenna farm. In intense heat, we erected four HF Yagis, two four-square vertical arrays for 40 and 80 meters, an 80-foot high Titanex vertical for 40/80/160m, phased verticals for 10 MHz, a Battle Creek Special vertical for 40/80/160, and Yagis for 6 and 2m. We also assembled six stations and a computer network for real-time logging and creation of logs for uploading by satellite phone to the Internet.

We were a little worried at the response of the naval base personnel to the creation of a major transmitting station so close to their installation so we took great care to meet the head of the base and explain our objectives. We were delighted to receive total cooperation, even to the extent that naval personnel helped with some of the antenna erection work. By 23:30Z on the following day, we were ready to go, a full 24 hours ahead of schedule. We arranged four-hour shifts for operators, giving each operator eight hours a day for operating, eight hours for sleep, and eight hours for relaxation—in theory!

### 9M0C on the air

Steve, G4JVG, made the first contact and from there it didn't stop. In the first 24 hours we had 8000 QSOs in the log and the rate continued steadily throughout the whole expedition.

Conditions, though not outstanding, were acceptable. The solar flux peaked at 107 during the operation, but subsequently declined towards the end.

### Operating from Spratly

It was a unique privilege to operate from Spratly with such a range of state-of-the-art equipment. Four Yaesu FT-1000MPs with VL-1000 solid-state linear amplifiers worked flawlessly during the 12 days of 24-hour/day operation. Two other stations used FT-920 transceivers "barefoot" with excellent results. The antennas went together easily and performed exactly to specification.

On any DXpedition, quickly getting to know the times for band openings to various parts of the world is vital. Using our own propagation predictions and the input from our pilot stations, we quickly built-up an understanding of which bands to use when and to where. As expected, peak activity was around dusk and dawn when all nine LF and HF bands were buzzing with signals. This forced some tough choices and even with the six HF stations available, we were unable to cover all the available bands during these periods. During the night, 160, 80, 40, and 30 were very busy, and during the day all bands between 14 and 28 MHz had reliable propagation.

Pile-up discipline was varied. Japan and the US were generally good, but Europe.... All the operators had plenty of opportunity to brush-up on their pile-up techniques, and given the volume of callers we had, it's rewarding that we were able to keep up the QSO rate. CW QSO rates peaked at over 300/hour on one station, with SSB rates peaking even higher—this in conditions where we were taking pains to give our own callsign very regularly, thus slowing QSO rates.

The days of operating dissolved into a blur. Most operators began to suffer a little from disturbed sleep patterns (particularly Mike, G3SED; and Don, G3XTT, who shared the overnight 160 meter operating), but after awhile we became acclimatized to taking short naps when time allowed. I was able to study and pass my PADI diving qualification and explore some of the coral reef areas off the island. The opportu-

nity to see hammerhead sharks, white tip sharks, sea turtles, manta rays and dolphins was truly a memorable experience.

### The final tally

The end results show 65,524 QSOs in 180 countries over the ten bands from 6 meters to 160 meters, including 2075 QSOs on RTTY and 1149 on 160 meters. This DXpedition has the fourth highest QSO total ever, and we believe the highest of any on RTTY.

The support we received from the resort personnel could not have been better. Always accommodating to our needs, they went out of their way to help and ensure that we had everything we needed. This included refurbishing our nine wooden packing crates for their return sea voyage, and handling the logistics of shipping the air freight in the tiny aircraft that serves the island as its only regular transport link with the rest of the world.

At the end of the operation, it took little more than a day to pack everything and ship it back to the UK. We all flew out of Layang Layang, happy that the job was well done, but sad to leave a tropical desert island which had been our home for two weeks.

A welcome dinner hosted by the Sabah Tourism Promotion Corporation and a press conference, attended by the minister for tourism, awaited us in KK followed, for me, by the long flight home. Before returning to the cold and mists of England in February, the others made a brief stopover at the Hillview Gardens Resort at Keningau in the Borneo highlands. The resort is run by Doris and Alfons Udans, 9M6DU and 9M6MU.

We hope to prepare a book on the experience of mounting a major DXpedition from scratch. Next time it will be a bit easier! In the words of Martti Laine, OH2BH, "Where do we go next?"

The 9M0C DXpedition team extends its gratitude to INDEXA for its support during the 1998 operation.

## "Where America's Day Really Begins": Wake Island—KH9

by Tom Harrell, K8XP/KH9

After six taxing days of long hours, high heat and humidity, and a large black fly population, the Dateline DX Association team members returned home in September '97 from North Cook, ZK1XXP. Little did they realize, Dateline would soon be on the road again. Preparations were underway for a DXpedition to Wake Island, KH9, an entity which had climbed from 86th to 63rd on DXer's "most wanted" lists.

Just prior to the North Cook DXpedition, I learned that in the near future I might be returning to Wake Island on business. Towards the end of the ZK1XXP operation, I received word that my business trip was confirmed for February. Soon discussion commenced on the possibility of a second Dateline operation from Wake.

While on North Cook several of the operators expressed their desire to participate in the KH9 operation but as a reserved commitment due to a number of uncertainties. When we learned the operation would be from February 25th to March 11th, we discovered that of the existing DDXA members, only Mike, N6MZ, would be able to participate. The team was completed with the addition of Bob, N2OO, and Bill, N2WB, who would address our goal of providing RTTY. (Other goals included working the low bands and providing KH9 to EU.) Don, N1DG, agreed to be our webmaster and oversee electronic log checking.

During the initial planning stages our equipment crate still had not arrived from North Cook and we were concerned that we would lack several major items. The team committed some of its own radios and several manufacturers provided additional equipment and antennas.

As preparations continued, equipment transport created a new problem. All gear was required to travel to Wake via the U.S. postal system—a costly undertaking! Because of its past generosity and support, we contacted INDEXA which, without hesitation, provided a substantial sum to cover the cost of shipping.

The actual journey to Wake Island

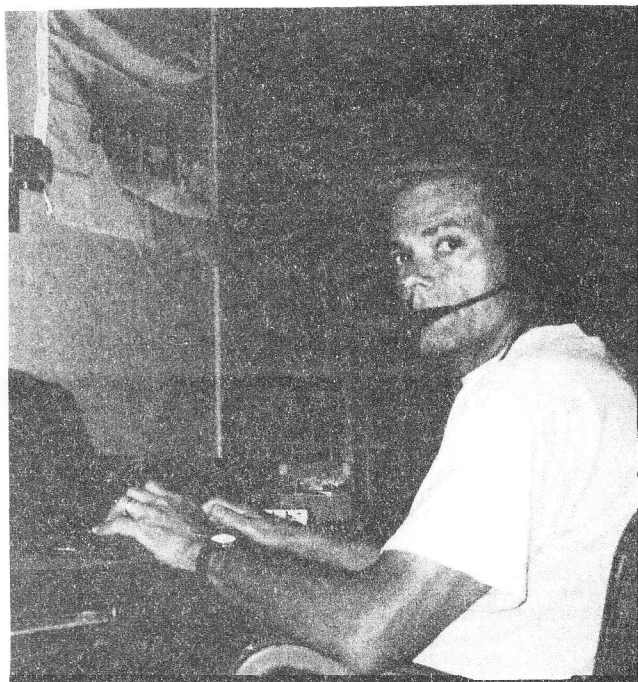
was uneventful.

Upon arrival we began erecting antennas and on Friday, February 27th, we made our first contact with JA7SW at 1000Z on 80m CW.

Amidst excessive heat and humidity, we operated 'round the clock with at least two radios on line at all times. The only exception was in the early mornings when propagation simply disappeared.

Of our fifteen days on the island, we spent thirteen in actual operation. We made approximately 23,000 QSOs including 700 RTTY contacts.

QSL to WA4YBV.



Tom, K8XP/KH9

### INDEXA on the www

We're on the worldwide web and [www.INDEXA.org](http://www.INDEXA.org) will take you to INDEXA's home page. The web page has been redesigned to include a membership application which can be printed, filled-out, and mailed to the secretary-treasurer, Bill Jennings, W4UNP, P. O. Box 607, Rock Hill, SC 29731 USA.

### E-mail

INDEXA's e-mail address is now complete: <[INDEXA@RHTC.net](mailto:INDEXA@RHTC.net)>. Please continue to send membership inquiries, applications, donations, and requests for tee-shirts or rubber stamps to INDEXA's secretary-treasurer: Bill Jennings, W4UNP, P. O. Box 607, Rock Hill, SC 29731 USA.

### New Life Members.....

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## Amateur Radio Clipart and Custom Graphics D'Laubach, WQ7B

**Y**ou know him as a purveyor of QSL routes on the INDEXA Information Session but do you know that WQ7B is also a graphic artist?

Doug has created clipart software for amateur radio that includes radio equipment, newsletter art, holiday graphics, humor, and much more. The software works on any PC with Windows '95, Windows 3.1, or DOS.

If you're not in the market for amateur radio clipart but you or your club find yourselves tiring of repetitive cut and paste jobs, or you need help designing

graphics or web pages, or you have some favorite graphics you'd like converted to floppy disk to run from your personal computer, contact Doug to discuss or negotiate custom work.

For an example of Doug's computer skills, take a look at the logos on this newsletter. Doug converted the INDEXA logo to disk, thereby eliminating INDEXA's cut and paste chores.

For more information, visit Doug's website at <http://www.qsl.net/wq7b/> or contact him directly: D'Laubach, Box 20, Carter, MT 59420.

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